Application No.: 09/833942

Case No.: 56319US002

Remarks

Claims 23 and 31 have been amended. Claims 27 and 34 have been cancelled, without prejudice. Claims 1-26, 28-33 and 35-37 are pending.

Reexamination and reconsideration of the application, as amended, is requested.

Table 1 on page 26 has been amended to correct an apparent error in the location of the data for Comp. C. It is readily apparent that each of the three Comp. C data should, respectively, be moved one space to the right.

Claims 23 and 31 have been amended to indicate that the T_g is in the range of 0°C to -70°C. Basis for this language may be found, for example, respectively, in claims 27 and 34.

Restriction Requirement

Claims 1-22 and 38-47 stand withdrawn from consideration because of a restriction requirement. Applicants elected with traverse the invention of Group I, species claims 23-37 (now 23-26, 28-33 and 35-37). Claims 27-37 were elected with traverse for examination. Such election with traverse is hereby affirmed. Reconsideration of the restriction requirement is hereby respectfully requested.

§ 103 Rejections

Claims 23-37 were rejected under 35 U.S.C. § 103(a) as being obvious over Beardsley, et al. (US 5,849,051), in view of DeFilippi (US 5,580,770) and in further view of Recker, et al. (US 5,627,222). This rejection is inappropriate and it should be withdrawn.

It is admitted in the Office Action that Beardsley, et al. fail to disclose a binder having the requisite glass transition temperature. Further, the action relies on DeFilippi for disclosure of the requisite glass transition temperature.

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It is also admitted in the Office Action that Beardsley, et al. fail to disclose the Shore A and Shore D hardness values or the aspect ratio of organic particles. The action, thus, refers to Recker, et al. for a teaching of toughened, fiber reinforced thermosetting resin matrix systems comprising elastomeric particles.

It is submitted that the combination of Beardsley, et al., DeFilippi and Recker, et al. is inappropriate because each of these references comes from nonanalogous art and one skilled in the art of making cleaning pads would not look to either DeFilippi or Recker, et al. for ways to modify the Beardsley, et al. articles.

One skilled in the art of making cleaning pads would not look to DeFilippi because DeFilippi does not relate to production of cleaning pads. Instead, DeFilippi discloses a biologically active support for removing pollutants from a fluid stream such as waste water. The support is formed of a polymeric foam substrate with a composition containing a particulate absorbent which absorbs and then releases pollutants. In any event, DeFilippi specifies a T_g lower than or equal to about 100°C, preferably less than or equal to about 50°C, most preferably less than or equal to about 0°C (col. 8, lines 21-40). Applicants' claims now specify a T_g in the range of 0° to -70°C.

Furthermore, Recker, et al. does not deal with cleaning pads but instead discloses toughened, fiber-reinforced thermosetting resin matrix prepregs and composites made therefrom (see Title). The prepreg art has nothing to do with the art of making cleaning articles. One skilled in the art of making cleaning articles would not look in nonanalogous art such as Recker, et al. for disclosure of modifications for making cleaning articles.

Further it is submitted that the rejection utilizes inappropriate hindsight reasoning to make the combination of references upon which the rejection is based. There is no proper incentive for combining the references as suggested in the Office Action.

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It is submitted that in view of the foregoing discussion, claims 23-26, 28-33 and 35-37 are allowable and such action is accordingly, earnestly solicited.

Respectfully submitted,

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March 14,2003

Ву:

Date

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Office of Intellectual Property Counsel 3M Innovative Properties Company Facsimile No.: 651-736-3833 Application No.: 09/833942

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Version with markings to show amendments made:

Table 1

Example	Binder	Binder T _p , °C	Particles	Particle hardness, Shore A	Particle hardness, Shore D	Cleaning Test Ranking	Gloss Test, change in gloss	Scratch Test, scratch(s) present	Wet Kinetic Coefficient of Friction
1	"ROVENE 4306"	-25	"NIPOL" 1411C	30		2	No	No	0.88
2	Natural rubber	-70	-	N/A	N/A	1	No	No	0.65
3	"ROVENE 4306"	-25		N/A	N/A	3	No	No	0.54
4	"ROVENE 4306"	-25	"NIPOL"	30		2	No	No	0.76
Comp. A	"ROVENE 4306"	-25	HYTREL" 5544		55	3	No	No	_
5	"ROVENE 4150"	-14	"HYTREL" 4056	**	40	3	No	No	0.37
6	ROVENE 5900"	4	"ESTANE" 58213	75		3	No	No	
7	"ROVENE 4306"	-25	"NIPOL" 1411C	30		2	No	No	0.84
Comp. B	R&H HA-16	35	"HYTREL 5526"	J-	55	4	Yes	No	
Comp. C	"ROVENE 4306"	-25	Calcium carbonate	Mohs hardness = 3	[1]=	[Yes] <u>1</u>	Yes	[] <u>Yes</u>	=
Comp. D	poly- urethane		talc	Mohs hardness = 1		4	No	No	0.25
Comp. E	styrene- butadiene copolymer latex	+4	talc	Mohs hardness = 1		4	No	No	0.26

23. (Amended) A cleaning article comprising:

a foam pad having a first major surface;

a plurality or organic particles having a Shore A hardness less than 80; and binder on at least a portion of the first major surface, the binder having a T_g [not greater than +10°C] in the range of 0°C to -70°C and binding the organic particles, at least in part, to the first major surface.

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- 27. Cancelled.
- 31. (Amended) A cleaning article comprising:
 - a foam pad having a first major surface;

a plurality of organic particles having a hardness of at least one of a Shore A hardness in the range from 80 to 100 or a Shore D hardness in the range from 30 to 50; and

binder on at least a portion of the first major surface, the binder having a T_g [not greater than] in the range of 0°C to -70°C and binding the organic particles, at least in part, to the first major surface.

34. Cancelled.